



INDUS VALLEY WORLD SCHOOL

ASTRONOMY

Exploring the Universe: Astronomy & Space Lab

ABOUT OUR SPACE SCIENCE

Igniting Curiosity | Building Future Scientists

Presented by: Astronomy Department (IVWS)





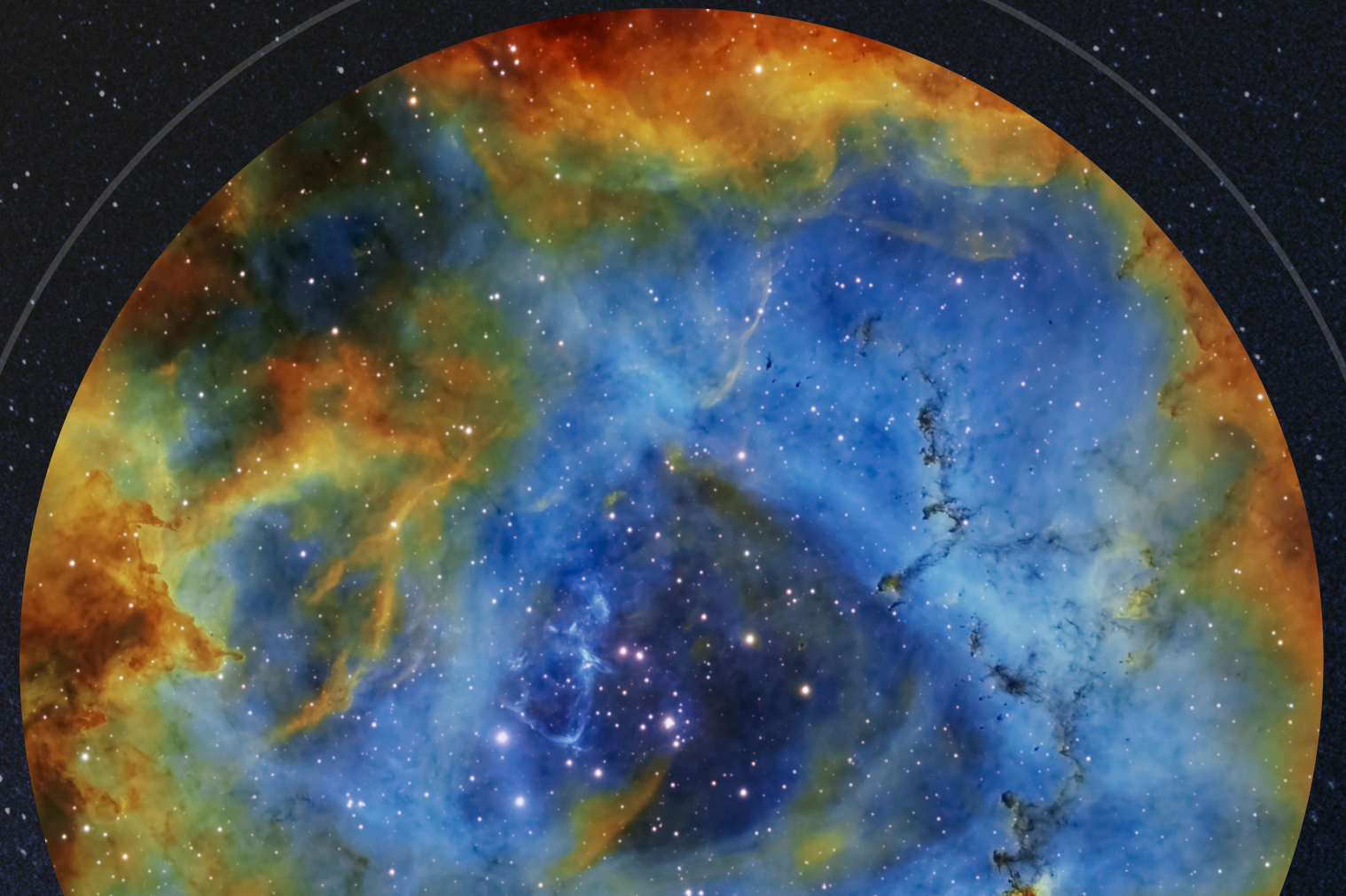
OUR VISION

- To inspire young minds to explore the wonders of the universe
- To develop scientific thinking and curiosity
- To integrate astronomy with hands-on learning and technology

“From stargazing to space exploration – we nurture curiosity!”

WHAT IS ASTRONOMY?

- Study of stars, planets, galaxies, and the universe
- Understanding space, time, and cosmic phenomena
- Combines science, imagination, and discovery

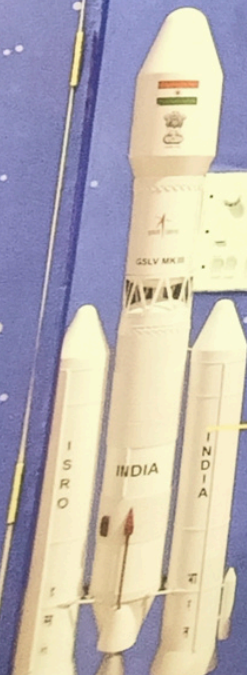


Evolution of Indian Satellites

CHANDRAYAAN-3 MOON MISSION

Chandrayaan-3, the succeeding mission to Chandrayaan-2, Launched on 14 July 2023 at 2:35 PM IST (09:05 AM UTC)

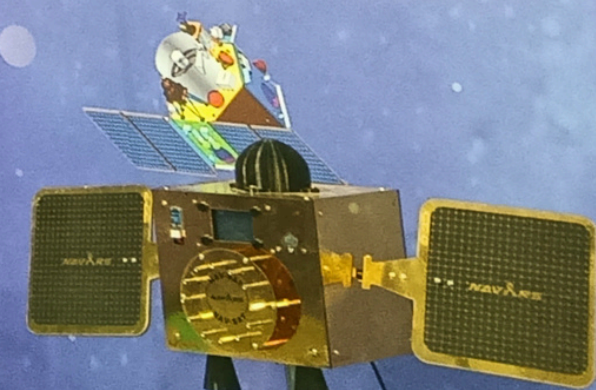
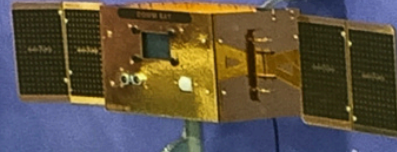
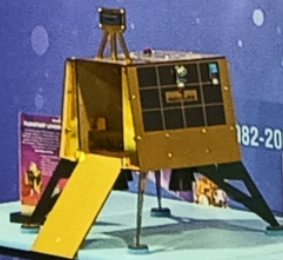
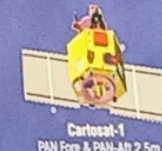
Mission life | **Mass**
1 Lunar day | **1,749.86kg**
(14 Earth days) | **including Rover**



LVM3-M4 Vehicle



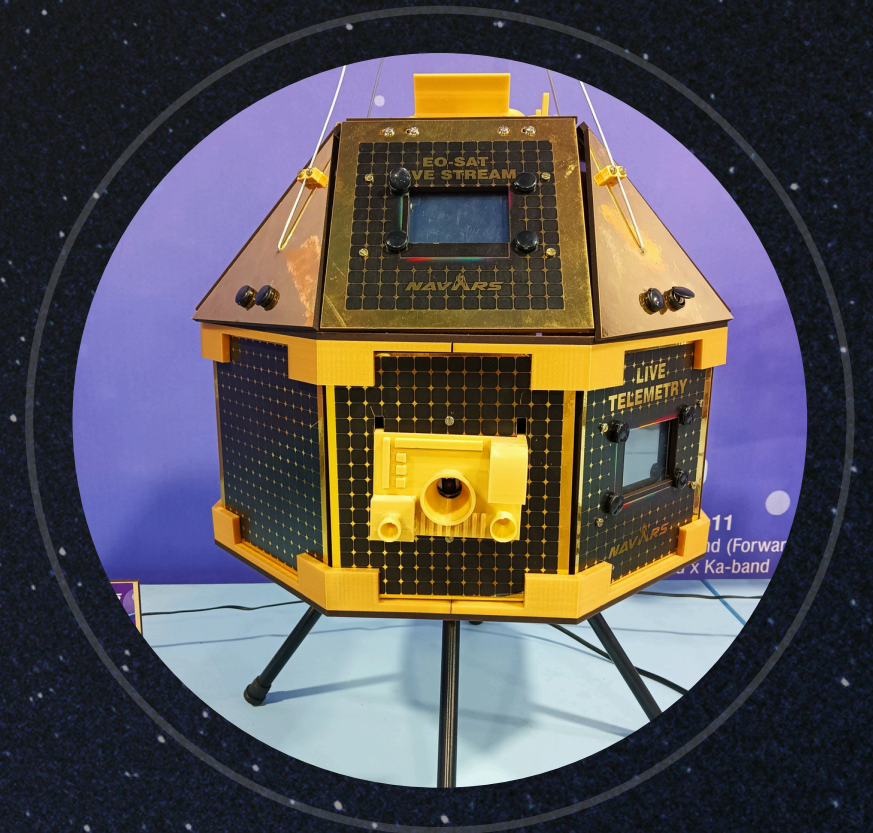
Lander & Rover



ABOUT OUR SPACE LAB

- Equipped with telescopes, models, and digital tools
- Hands-on learning environment with DIY kits
- Interactive experiments and simulations

Learning beyond textbooks through real experiences!



LEARNING FOR CLASSES 3-5 (JUNIOR EXPLORERS)

- Introduction to the Solar System
- Planets and their features
- Day & Night, Seasons
- Moon phases
- Fun activities: model making, storytelling, sky observation

LEARNING FOR CLASSES 6-7 (YOUNG ASTRONOMERS)

- Detailed study of planets and satellites
- Constellations and star patterns
- Basics of telescopes
- Introduction to space missions
- Practical sessions and sky watching

LEARNING FOR CLASSES 8-9 (ADVANCED LEARNERS)

- Galaxies and the universe
- Space technology and satellites
- Basics of astrophysics
- Integration with robotics and coding
- Basic learning of electronics and programming.



ROBOTICS INTEGRATION IN SPACE LEARNING



01 Building simple space models using robotics

02 Understanding rover technology (like Mars rovers)

03 Coding basics for simulations

04 Problem-solving and innovation

Connecting space science with future technology

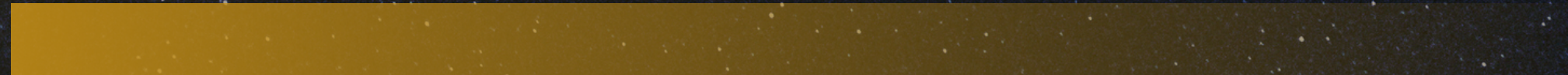
OUR PORTFOLIO



<p>Dr. Homi J. Bhabha 1909-1966</p> <p>Homi Jehangir Bhabha, FRS was an Indian Nuclear Physicist who is widely credited as the "Father of the Indian Nuclear Programme".</p>	<p>Dr. Vikram Sarabhai 1919-1971</p> <p>Dr. Vikram Ambalal Sarabhai was an Indian Physicist and Astronomer who initiated Space Research and helped develop Nuclear power in India.</p>
<p>Dr. A.P.J. Abdul Kalam 1931-2015</p> <p>Avul Pakir Jainulabdeen Abdul Kalam was an Indian Aerospace Scientist and Statesman who served as the 11th President of India from 2002 to 2007.</p>	<p>Kalpana Chawla 1962-2003</p> <p>Kalpana Chawla was first Indian-born American Woman Astronaut and Aerospace Engineer who was the first woman of Indian origin to fly to space. She first flew on Space Shuttle Columbia in 1997.</p>
<p>Shubhanshu Shukla</p> <p>Wing Commander Shubhanshu Shukla is a distinguished Indian Air Force group captain and test pilot, chosen as one of the first Indian test pilots in 2005, he became the first Indian test pilot to fly the IAS test aircraft, marking a significant milestone in Indian aerospace history.</p>	<p>Sunita Williams (b-1965)</p> <p>Sunita Williams is an American astronaut who has flown on three Space Shuttle missions and the International Space Station.</p>



“TODAY’S LEARNERS,
TOMORROW’S SPACE EXPLORERS!”





INDUS VALLEY WORLD SCHOOL

THANK YOU